

We claim:

1. A process for producing hollow plastic articles, encompassing the following steps:
- producing a tubular plastic parison on a blow molding plant or coextrusion blow molding plant
  - cutting open the extruded or coextruded plastic parison to give at least one semifinished open-surface product
  - thermoforming the resultant semifinished open-surface product to give half-shells
  - welding the thermoformed half-shells to give a hollow article.
2. A process as claimed in claim 1, wherein, prior to the welding of the thermoformed half-shells, incorporated parts are attached to the inner side of the half-shell.
3. A process as claimed in claim 2, wherein the incorporated parts are ventilation lines for pressure equilibration within the tank, fuel lines for equilibration of liquid within the tank, valves, anti-surge cups, or pump-related and/or tank sensor modules.
4. A process as claimed in any of the preceding claims, wherein the welding of the thermoformed half-shells takes place using the heat of thermoforming.
5. A process as claimed in any of the preceding claims, which proceeds without any additional heating steps or cooling steps.
6. A process as claimed in any of the preceding claims, wherein, prior to the cutting process, the tubular plastic parison is extended perpendicularly to the direction of extrusion, with the aid of a spreading device.
7. A process as claimed in any of claims 1 to 5, wherein the cutting of the plastic parison takes place prior to separation from the die, i.e. straight away during the extrusion process or immediately following the same.

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8. A process as claimed in claim 7, wherein the semifinished open-surface products are stretched perpendicularly to the extrusion device.
- 5 9. A process as claimed in any of the preceding claims, wherein the plastic parison has at least one layer made from polymeric material, preferably selected from the group consisting of polyethylene, polypropylene, polyvinyl chloride, polyamide, polyketone, polyester, and mixtures of these.
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10. A process as claimed in any of the preceding claims, wherein the structure of the plastic parison has two or more layers, encompassing preferably base layer, regrind layer,
- 15 adhesion-promoter layer, and/or barrier layer.
11. A process as claimed in any of the preceding claims, wherein the structure of the plastic parison has two or more layers, encompassing, from the outside to the inside:
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- a layer made from HDPE with a thickness of from 5 to 30%,
  - a regrind layer with a thickness of from 10 to 82%,
  - an adhesion-promoter layer with a thickness of from 1 to 5%,
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- a barrier layer with a thickness of from 1 to 10%,
  - an adhesion-promoter layer with a thickness of from 1 to 5%, and
  - a layer made from HDPE with a thickness of from 10 to 40%, based in each case on the total thickness of the
- 30 container wall.
12. A hollow plastic article which can be produced by the process as claimed in any of claims 1 to 11.
- 35 13. The use of a hollow plastic article obtainable by the process as claimed in any of claims 1 to 11, as a plastic fuel tank in motor vehicles, as a gasoline canister, a plastic tank for storage or transport of heating oil, diesel, or the like, a transport container on a utility vehicle, for example for
- 40 crop sprays, a solvent container, a plastic bottle, or the like.